

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) Apparatus for conditioning mammalian blood for subsequent use in a medical procedure, the apparatus comprising:

a cabinet having a secure environment and a door providing the only access to the secure environment;

an input system for transporting a blood charge from a source to the cabinet;

a flask removably contained in said secure environment and coupled to the input system to receive said charge;

stressors coupled to the cabinet and positioned for operation to create a conditioned charge in the flask, said stressors comprising an oxygen source removably coupled to the cabinet, and an ozone generator coupled to the oxygen source to generate an ozone/oxygen mixture for delivery to the flask;

an output system coupled to the flask and including a receiver for the conditioned charge; and

a control means ~~system~~ contained in the cabinet and operable upon closing the door to lock the door and to then automatically condition the charge and to cause the charge to move from the flask to the receiver, whereby a charge from the input system is conditioned and delivered to the receiver, the door is then unlocked and the conditioned charge is ready to be removed and used to complete the medical procedure.

2. (Original) Apparatus as claimed in claim 1, wherein the input system includes an input syringe operable to draw blood to form at least part of said charge, and input tubing connecting the input syringe to the flask to transport the charge into the flask.

3. (Original) Apparatus as claimed in claim 2, wherein the input tubing is thermoplastic tubing, and in which the cabinet includes a first heat sealer operable to seal and sever the input tubing, whereby the input syringe can be separated from the cabinet and flask for subsequent disposal.

4. (Original) Apparatus as claimed in claim 2, wherein the input syringe includes a valved T-connector having first and second ports so that the first port is available to draw the charge and the second port is attached to the input tubing for use to transport the charge to the flask.

5. (Original) Apparatus as claimed in claim 1, wherein the flask has an internal volume sufficient to permit the charge to bubble thereby increasing the surface area available for the stressors to condition the charge.

6. (Original) Apparatus as claimed in claim 1, wherein the flask includes a main portion defining an internal volume to receive the charge and a connector assembly coupled to the main portion.

7. (Original) Apparatus as claimed in claim 6, and further including a probe coupled to the connector assembly and contained in the main portion, the probe extending to a leading end and having an input lumen coupled to the input system to deliver the charge into the internal volume and an output lumen coupled to the output system for delivering the conditioned charge to the output system.

8. (Original) Apparatus as claimed in claim 7, wherein the probe further includes a gas lumen coupled to one of said stressors for delivering a gas stressor to the charge to cause the charge to bubble.

9. (Original) Apparatus as claimed in claim 7, wherein the probe further includes a further lumen and a temperature sensor positioned in the further lumen for monitoring the temperature of the charge.

10. (Original) Apparatus as claimed in claim 7, wherein the lumens extend to the leading end.

11. (Original) Apparatus as claimed in claim 8, wherein the lumens extend to the leading end.

12. (Original) Apparatus as claimed in claim 9, wherein said further lumen ends adjacent said leading end at a side opening and in which the temperature sensor terminates in the side opening for better thermal contact with the charge.

13. (Original) Apparatus as claimed in claim 12, and further including a filmic sleeve surrounding the temperature sensor to avoid contact between the sensor and the charge

14. (Original) Apparatus as claimed in claim 9, wherein the temperature probe further includes an extension engaged in said further lumen at the leading end of the probe and extending downwardly, and in which the flask includes a socket at the bottom of the main portion and extending downwardly to accommodate at least part of said extension to locate the probe in the main portion of the flask.

15. (Original) Apparatus as claimed in claim 14, wherein the socket is crimped to hold the extension in the socket.

16. (Original) Apparatus as claimed in claim 1, wherein one of said stressors is an infrared source positioned in the cabinet under the flask for radiating the charge to heat the charge in the flask.

17. (Original) Apparatus as claimed in claim 1, wherein one of said stressors is an ultraviolet source positioned in the cabinet for subjecting the charge to ultraviolet light to stress the charge in the flask.

18. (Original) Apparatus as claimed in claim 1, wherein the cabinet includes a cavity for receiving the flask in a downward movement, the cavity being positioned to locate the flask in relation to the stressors.

19. (Original) Apparatus as claimed in claim 1, wherein the cabinet includes a front recess, and a top depression above the recess, the door being shaped to cover both the front recess and the depression when the door is in the closed position.

20. (Original) Apparatus as claimed in claim 1, wherein the receiver is an output syringe.

21. (Currently Amended) Apparatus as claimed in claim 20, and further including an actuator attached to the cabinet and positioned to operate the output syringe as directed by the control ~~system~~ means to first draw the conditioned charge from the flask and to then be used to inject the charge into the patient.

22. (Original) Apparatus as claimed in claim 20, and further including thermoplastic output tubing connecting the flask to the output syringe to transport the conditioned charge to the syringe.

23. (Currently Amended) Apparatus as claimed in claim 22, and further including a second heat sealer attached to the cabinet and positioned to be operated by the control ~~system~~ means to seal and sever the output tubing between the flask and the output syringe.

24. (Original) Apparatus as claimed in claim 21, and further including a knocker attached to the cabinet and positioned to rap the output syringe to dissipate any bubbles in the conditioned charge contained by the output syringe.

25. (Currently Amended) Apparatus as claimed in claim 1, wherein the control system means includes an identification system for recognizing a first identifier carried by the operator, and a second identifier carried by the patient, the identification system being adapted to recognize and to then permit the operator to operate the apparatus.

26. (Original) Apparatus as claimed in claim 1, and further including an operator card reader for reading discrete information on a card used to identify the operator of the apparatus to prevent unauthorized use.

27. (Original) Apparatus as claimed in claim 26, and further including a patient card reader for reading discrete information on a patient card used to identify the patient so that the patient can be identified by presentation of the patient card to the patient card reader.

28. (Original) Apparatus as claimed in claim 1, and further including a printer for providing a printout of data relating to the procedure for an individual patient.

29. (Currently Amended) Apparatus as claimed in claim 1, wherein the control system means includes a graphic display interface for the operator.

Claims 30-67 (Canceled)